

I claim:

1. An oil and gas recovery system for simultaneously injecting compressed gases cooled by recovered liquids and liquids heated by the heat of compression of recovered gasses into an oil and gas well for uninterrupted production from said well during well maintenance.
2. The recovery system in claim 1 wherein the frequency of lift gas injection is controlled by wellhead pressure.
3. A lift gas injection unit for recovering oil and gas from a well controlled by wellhead gas pressure.
4. The unit in claim 3 wherein said lift is pulse lift
5. A lift gas injection unit for simultaneously injecting fluids into an oil and gas well without interrupting production.
6. A lift gas oil and gas recovery unit controlled by wellhead pressure for simultaneously injecting compressed gasses cooled by recovered liquids and liquids heated by the heat of compression of recovered gasses into an oil and gas well for well maintenance without interrupting production.
7. The recovery unit in claim 6 wherein said compressed gasses are gasses recovered from a subterranean reservoir by said oil and gas well.
8. The recovery unit in claim 6 wherein said liquids heated by the heat of compression of recovered gasses are liquids recovered from a subterranean reservoir by said oil and gas well.
9. The recovery unit in claim 8 wherein said liquids may include saltwater.
10. The process of transferring heat generated by compressing gas to heat liquids and to cool gases being compressed, and injecting said liquids into an oil and gas well for well maintenance without interrupting the injection of cooled lift gas.
11. The process in claim 10 wherein said gas is natural gas recovered using said well, and the heated liquid injected into said well is crude oil recovered using said well, water, or a mixture thereof.
12. The process of injecting lift gas and heated liquids for well maintenance into an oil and gas well simultaneously.
13. The process in claim 11 where said lift gas is natural gas recovered using said well, and a heated liquid injected into said well is crude oil recovered using said well, water, or a mixture thereof.
14. The combined process of simultaneous well maintenance and oil and gas recovery from an oil and gas well wherein the stroke frequencies of a gas compressor are controlled by the pressure of natural gas from said well, heat generated by said compressor is transferred to liquids to be injected into said well, and gas compressed by said compressor is simultaneously injected into said well to lift liquids with or without heated liquids for well maintenance.